

APPENDIX O

Some Common Unit Conversions

Concentration Notes:

• The symbol " ≈ " means approximately.

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1 milligram (mg) = 1 x 10^{-3} gram = 0.001 gram
1 microgram (µg) = 1 x 10^{-6} gram = 0.000001 gram
1 milliliter (mL) = 1 x 10^{-3} liter = 0.001 liter
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• Concentrations of various water quality parameters are usually measured in:

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milligrams per liter (mg/L) — or — micrograms per liter (\mug/L). (To convert between the two: 1 mg/L = 1,000 \mug/L )
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Also used to measure concentration are the units "parts per million" (ppm) and "parts per billion" (ppb). For general purposes, one can use the following very simple conversions: 1 ppm \approx 1 mg/L and 1 ppb \approx 1 μ g/L

Length:

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1 millimeter (mm) = 1 x 10^{-3} meter = 0.001 meter
1 micrometer (\mum) = 1 x 10^{-6} meter = 0.000001 meter
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Estimating Total Dissolved Solids from Electrical Conductivity:

To convert total dissolved solids (TDS) to electrical conductivity (a measure of salinity): the TDS concentration in mg/L is approximately 65 percent of the electrical conductivity value in μ S/cm.

References

Harter, T. 2003. Groundwater Quality and Groundwater Pollution. Farm Water Quality Planning Series, Reference Sheet 11.2, Publication Number 8084. University of California, Division of Agriculture and Natural Resources, Oakland, California.

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- U. S. Environmental Protection Agency Region 7. Understanding Units of Measurement. Last viewed at: http://www.epa.gov/region7/citizens/amoco/units_measurement.htm on July 14, 2008.
- U. S. Geological Survey Pennsylvania Water Science Center. Conversion Factors, Datum, and Abbreviations. Last viewed at: http://pa.water.usgs.gov/conversions.html on July 14, 2008.